

Written and Programming MidTerm

SI539 - Charles Severance

Textbook: Build Your own Ruby on Rails Application by Patrick Lenz (ISBN:978-0-975-8419-5-2)

Written Midterm Overview

- March 5, 9:30 - 12:00
- Closed Book - Two Pages of Notes
- Question Types
 - Short Answer - Conceptual
 - What would this code do?
 - “Fix broken code” or add “what is missing”
- Focus on Lecture Notes
- No Writing Ruby code sequences - only very simple HTML sequences

Lloyd: Chapter 2

- History of HTML - how HTML has evolved - don't memorize dates
- Purpose of DOCTYPE tag
- html, head, and body tags
- list tags (ul, ol, li)
- HTML comments

Lloyd: Chapter 2

- p, div, span tags
- href tag
- img tag, alt, height, and width attributes

Lloyd: Chapter 3

- Conceptual separation of content and presentation
- Three ways of styling - inline, embedded, and external style sheets
- id and class attributes - how are they different and when to use each
- Do not memorize any CSS attributes like “font-family”, etc

Lloyd: Chapter 3

- Anatomy of a CSS rule - able to read CSS and understand what it will do
- Different selectors (styling a tag, styling by id, styling by class) - I may give some sample CSS+HTML and ask “which part turns blue?”
- Do not memorize colors
- Do not worry about intricate font selection details

Lloyd: Chapter 5

- Images
- Not covered at all except for the img tag (see Chapter 2)

Lloyd: Chapter 6

- Building a basic table
- Using the table, tr, th, and td tags
- Understand colspan
- Do not worry about styling tables

Lloyd: Chapter 7

- You will **not** have to construct the HTML for a form
- Know the difference between GET and POST
 - When to use and not use
- Understand usage for input types: text, password, text area, radio button, checkbox, and submit

Lenz: Chapter I

- Review Lecture Slides
- Rails Development Principles
- Model - View - Controller - be ready to describe the purpose of each and their interactions at a high level
- Request and Response Cycle

Lenz: Chapter I

- What is Ruby - what is Rails?
- Rails Application Layout - what directories would you find things?

Lenz: Chapter 2

- Not covered on midterm

Lenz: Chapter 3

- Not covered on midterm

Lenz: Chapter 4

- Understand what a database is in general terms
- Familiar with the SQLite Browser Interface
- Understand what these commands do in general
 - `ruby script/generate model Story`
 - `ruby script/generate controller Story index add delete`

Lenz: Chapter 4

- Familiar with the Embedded Ruby Syntax in rhtml files
- Understand difference between <% and <%=
- Understand how to pass data between the controller and view

Lenz: Chapter 5

- Do not worry about YAML
- Be able to describe the general purpose of migrations
- Understand the difference between rails console and irb
 - `ruby script/console`
 - `irb`

Lenz: Chapter 5

- Basic use of the Rails console to manipulate model objects
 - Do Assignment 7 - Your First Model
- Understand making a controller
 - `ruby script/generate controller Story index`

Written Midterm Summary

- A lot of material to cover - Diverse topics
- Breadth not depth - Make sure to skim through all the slides
- Famous last words: My intent is that the questions are straightforward and detect if you have a basic understanding of things

Programming Midterm

- March 11 - 4PM - 6PM - I will need two rooms
- Two Hours
- Open Book, Open Notes, Open Network
- Can use/adapt old assignments
- You must not get help from another person

Programming Midterm

- Think of it as a redo of a subset of Assignment 6 under pressure
- CSS will be really trivial
- Best study - re-do assignment 6 and time yourself
- Must achieve the specifications exactly
 - No more
 - No less